



The Sustainable Development Goals Nexus: How Women's Health Shapes Rural Social and Economic Development

Mahwish Siraj¹ , Sher Nawab²

¹Department of Agricultural Science Allama Iqbal Open University, Islamabad, Pakistan

²Institute of Development Studies, The University of Agriculture, Peshawar, Pakistan

ARTICLE INFO

Keywords:

Women's health, Rural development, Gender norms, Primary healthcare, Sustainable Development Goals (SDGs)

Corresponding Author:

Sher Nawab, Institute of Development Studies, The University of Agriculture, Peshawar, Pakistan

Email:

shernawabsafi99@gmail.com

ABSTRACT

Women's health plays a central yet often overlooked role in shaping rural social and economic development, particularly in low-resource contexts. This study explored how women's health influences development trajectories in rural communities of Mardan and Nowshera districts in Khyber Pakhtunkhwa (KP), Pakistan, drawing on qualitative insights from multiple community and health-system stakeholders. Using an exploratory qualitative research design, data were collected through in-depth interviews, focus group discussions, and key informant interviews with women, male household decision-makers, community leaders, and frontline health providers. Reflexive thematic analysis revealed three interconnected thematic domains: (1) constrained health access shaped by gender norms, mobility restrictions, and inconsistent health system functionality; (2) the invisible burden of women's health on household productivity, childcare, education, and nutrition; and (3) the recognition among community stakeholders that improvements in women's health are essential to achieving broader development progress, despite persistent socio-cultural and structural barriers.

Findings demonstrate that poor women's health is not only a medical concern but a structural limitation affecting household livelihoods, intergenerational well-being, and progress toward Sustainable Development Goals (SDGs), particularly SDGs 3, 4, 5, and 8. The study concludes that integrated, gender-responsive strategies strengthening primary healthcare, enhancing women's autonomy, and embedding women's health priorities across rural development policies are necessary to support sustainable transformation. These insights underscore the importance of positioning women's health as a core development driver rather than an isolated health-sector issue.

INTRODUCTION

Women's health is central to sustainable development because it directly influences economic productivity, social well-being, and long-term human capital formation (World Health Organization [WHO], 2023). In Pakistan, where the population surpassed 247 million in 2023, health system performance remains constrained by limited public health investment, with current expenditure estimated at 2.9% of GDP, accompanied by one of the highest levels of out-of-pocket health spending in South Asia (Pakistan Bureau of Statistics, 2023; World Bank, 2024). These systemic limitations disproportionately affect rural women, who already face barriers related to mobility, patriarchal norms, and accessibility of healthcare facilities.

Maternal and reproductive health outcomes highlight ongoing inequities. Pakistan's maternal mortality ratio, estimated at 154 deaths per 100,000 live births, remains higher than global and regional targets, despite gradual improvement (World Bank, 2024). Research indicates that rural women experience greater delays in receiving antenatal care, skilled delivery services, and emergency obstetric care due to socio-cultural norms, transportation constraints, and insufficient rural facility readiness (Raza, Hassan & Rafiq, 2022; National Institute of Population Studies, 2023). These inequalities threaten progress toward Sustainable Development Goal (SDG) 3 (Good Health and Well-Being).

The relationship between women's health and development is reciprocal. Poor health reduces women's ability to participate in productive agricultural and non-farm labour, which is significant in rural households that rely on women's unpaid and informal contributions (Government of Pakistan, 2022). Pakistan's female labour force participation remains low approximately 24%, well below regional and global averages reflecting entrenched gender roles and limited access to health, nutrition, education, and decision-making power (World Bank, 2024).

In Khyber Pakhtunkhwa (KP), the study area, rural communities depend heavily on primary-level service delivery through Lady Health Workers (LHWs), Lady Health Visitors (LHVs), and Community Midwives (CMWs). While these cadres play a pivotal role in improving maternal and child health outcomes, coverage gaps, resource shortages, and inconsistent supervision continue to limit their effectiveness (Government of Pakistan & UNICEF, 2022).

Recent development assessments indicate that Pakistan is off-track on more than 60% of SDG indicators, especially those linked to gender and health (United Nations, 2024). These challenges highlight the need for localized qualitative evidence to better understand how women's health intersects with socioeconomic realities, household dynamics, and rural institutional support systems.

This study addresses that gap by exploring women's health experiences in Mardan and Nowshera districts of KP, examining how gender norms, health access, economic conditions, and community structures shape progress toward interdependent SDGs. The findings aim to inform context-specific, gender-responsive policymaking and rural development strategies in Pakistan.

Methodology

Study Design

This study employed an exploratory qualitative research design (Naz et al., 2024a; Riaz et al., 2024a) to investigate how women's health shaped social and economic development in rural communities of Mardan and Nowshera districts in Khyber Pakhtunkhwa, Pakistan. Qualitative methods were selected to capture lived experiences, meanings, and socio-cultural processes, rather than measuring statistical associations (Creswell, 2013). The design was inductive and

iterative, allowing themes to emerge naturally from participants' narratives while being interpreted in relation to the SDGs framework (Braun & Clarke, 2006).

Conceptual Framework of the Study

The conceptual framework (Figure 1) illustrates how women's health functions as an interconnected driver of social and economic development in rural communities. Positioned at the center, women's physical, reproductive, and mental health are influenced by structural and relational determinants, including access to healthcare services, socio-cultural norms shaping decision-making power, availability of financial resources, and institutional support systems. These determinants interact to shape women's health outcomes, which in turn generate cascading effects across multiple SDGs. Improved women's health strengthens household economic productivity (SDGs 1 and 2), enhances children's education and well-being (SDG 4), supports gender equality and autonomy (SDG 5), and contributes to broader community health and resilience (SDG 3). The framework also reflects feedback loops whereby developmental improvements reinforce women's health over time, demonstrating the cyclical and mutually reinforcing nature of the SDG nexus. This visual model guided both the analytical orientation and interpretation of findings throughout the study.

THE SDG NEXUS: WOMEN'S HEALTH AND RURAL DEVELOPMENT

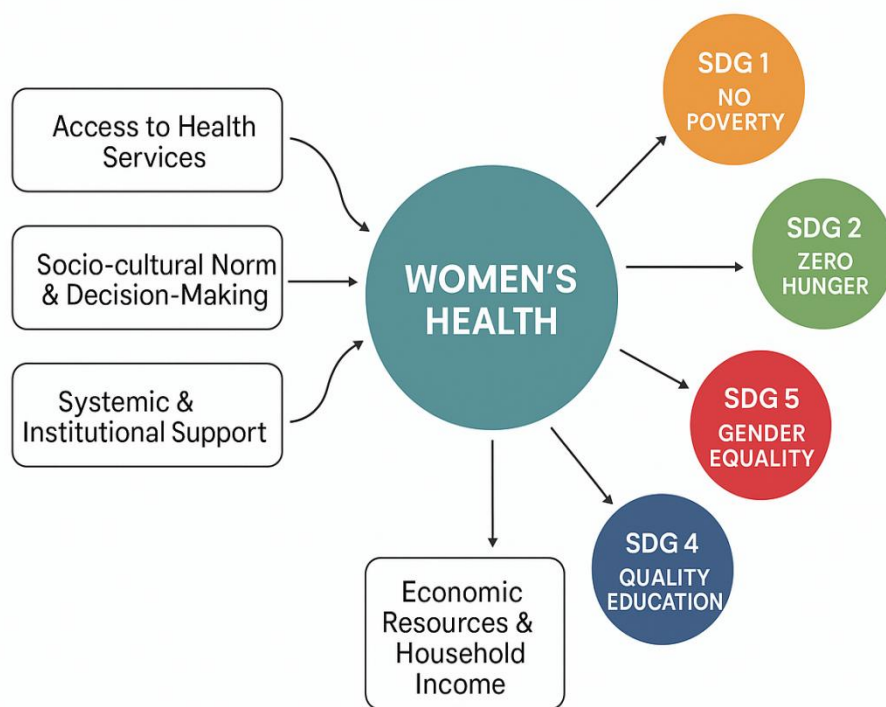


Figure 1. Conceptual framework illustrating the SDG nexus between women's health and rural socio-economic development in Khyber Pakhtunkhwa, Pakistan.

Study Setting and Participants

We conducted the study in purposively selected rural communities in Mardan and Nowshera districts. These districts were chosen because they reflect core rural socio-economic and health realities in KP, such as gendered restrictions, mixed use of formal and informal health providers, and socio-cultural norms around women's mobility and service use (Naz, Aslam, & Karim, 2022; Naz, Khan, & Azam, 2023). These settings also have active Lady Health Worker (LHW)

networks and community midwives, making them highly relevant for exploring system-community dynamics.

Participants included:

- Women of reproductive and post-reproductive age,
- Male household decision-makers,
- Community stakeholders (religious leaders, Village or Neighbourhood Council members), and
- Health-system actors, such as LHWs, community midwives (CMWs), traditional birth attendants (dais), and facility-based providers.

Including these multiple stakeholder groups facilitated triangulation and provided a holistic understanding of how women's health intersects with broader rural social and economic development.

Sampling Strategy

We used purposive, criterion-based sampling (Afridi et al., 2025; Naz et al., 2025; Riaz et al., 2025; Ishtiaq et al., 2025) to recruit participants with relevant experiences and knowledge. To maximize variation, we sampled across age, parity, education, marital status, and socio-economic background (Creswell, 2013). Recruitment continued until thematic saturation was reached, which we defined as the point where no new substantive themes emerged in at least three consecutive interviews (Braun & Clarke, 2006). Our final sample consisted of:

- 20–30 in-depth interviews (IDIs) with women,
- 8–10 IDIs with health providers and decision-makers, and
- 6–8 focus group discussions (FGDs), gender-segregated, each with 6–8 participants.

Data Collection Methods

Data collection combined semi-structured interviews (IDIs), FGDs, and key informant interviews (KIIs). Interview guides were pilot-tested and refined for cultural sensitivity and clarity.

- IDIs probed women's health experiences (maternal health, reproductive autonomy, nutrition), health-seeking behaviors, decision-making processes, and perceived social/economic impacts of illness.
- FGDs explored community norms, gender roles, labor expectations, and perceptions of how women's health contributes to community well-being and development.
- KIIs with LHWs, community midwives, facility-based providers, and local leaders helped uncover system-level perspectives and barriers.

All sessions were audio-recorded with informed consent, supplemented by observational field notes. Interviews were conducted in Pashto or Hindko, according to participants' preference, and later translated into English.

Data Management and Analysis

Audio recordings were transcribed verbatim, and transcripts in local languages were translated into English with back-translation to preserve meaning. NVivo software was used for data management and coding (Bazeley & Jackson, 2013).

We used a reflexive thematic analysis approach, following Braun and Clarke's six-phase process: familiarization, coding, theme development, review, definition, and write-up (Braun & Clarke, 2006, 2021). Coding was both inductive and deductive: inductive to capture emergent themes, and deductive by applying a priori codes tied to SDG-related domains (e.g., gender equality, health, economic empowerment). Two independent coders analyzed a subset of transcripts to ensure inter-coder reliability; discrepancies were resolved via discussion. We used NVivo's matrix queries and framework matrices to compare themes across participant types (women, men, providers) and between the two districts.

Trustworthiness and Rigor

Qualitative rigor was ensured based on Lincoln and Guba's (1985) criteria:

- **Credibility:** achieved through data source triangulation (IDIs, FGDs, KIIs), peer debriefing, and member checking of emerging themes with some participants.
- **Transferability:** supported by rich, thick description of context, community norms, and participant demographics.
- **Dependability:** documented through an audit trail that recorded decisions about sampling, coding, and analysis.
- **Confirmability:** realized through reflexive journaling and direct quoting of participants to ground analytic interpretations.

Ethical Considerations

We obtained ethical approval from the relevant institutional review board prior to fieldwork. All participants gave informed consent where literacy was limited, a thumbprint was used. We guaranteed confidentiality by anonymizing transcripts and securely storing data. Participation was voluntary, and individuals were free to withdraw at any point (Amin et al., 2025; Naz et al., 2024b; Riaz et al., 2024b). Because sensitive topics (e.g., reproductive health, gender-based constraints) could arise, we established referral pathways to local health and social support services for participants needing additional help.

Limitations

As in many qualitative studies, the findings are not statistically generalizable beyond the study sites. Social desirability may have influenced responses, especially in group settings. Although we translated interviews into English for analysis, some nuance could have been lost; we mitigated this by using back-translation and bilingual coders.

Results

Analysis of qualitative data from 28 IDIs, 8 KIIs, and 7 FGDs revealed the interconnected role of women's health in shaping rural social and economic development in Mardan and Nowshera districts, Khyber Pakhtunkhwa. Four major themes emerged, reflecting participants' lived experiences, perceptions, and socio-cultural context: (1) Access to and utilization of health services; (2) Women's health and household economic productivity; (3) Social norms, gender roles, and decision-making; and (4) Community and system-level support.

1. Access to and Utilization of Health Services

Participants highlighted the centrality of health service access for women's well-being and its broader socio-economic implications. Women's experiences reflected both physical and structural barriers, as well as the critical role of community health workers.

- **Physical and Financial Barriers:** Many women reported travel times of 20–45 minutes to the nearest Basic Health Unit, with transportation costs and treatment expenses influencing healthcare-seeking decisions. Delayed or foregone care was common among lower-income households.

"Sometimes we wait for days at the government hospital, but the private clinic is quick, although it costs more than we can afford." – IDI Participant, Mardan

- **Community Health Workers and Midwives:** LHWs and CMWs played a pivotal role in facilitating health service utilization. They conducted home visits, provided health education, delivered basic services, and referred women to higher-level facilities.

"Our LHW visits every month; she advises us when to go to the hospital and checks the children's health." – FGD Participant, Nowshera

- **Perceived Quality and Cultural Acceptability:** Participants often preferred private or traditional providers due to shorter waiting times, culturally sensitive care, and personalized attention.

2. Women's Health and Household Economic Productivity

Women's health significantly affected household labor allocation, agricultural productivity, and income stability. Maternal illness or chronic conditions constrained women's participation in domestic and farm work, often shifting responsibilities to male household members or older children.

- **Labor Substitution:** Men and youth frequently assumed women's responsibilities during periods of illness, reducing time available for income-generating activities.

"When my wife fell ill after childbirth, I had to manage the fields and children myself. Our income dropped for that month." – **IDI Participant, Mardan**

- **Health-Related Expenditures:** Households frequently incurred out-of-pocket costs for transportation, medications, and consultations. Financial coping strategies included borrowing, selling livestock, or reducing consumption, which had downstream impacts on nutrition and livelihood resilience.

"I sold a goat to pay for my wife's hospital visit. It was difficult for the family, but necessary." – **IDI Participant, Nowshehra**

- **Impact on SDG Goals:** Participants recognized that women's health directly influenced household income, food security, and children's well-being, illustrating its nexus with broader SDGs such as poverty reduction, hunger alleviation, and gender equality.

3. Social Norms, Gender Roles, and Decision-Making

Cultural norms and patriarchal decision-making structures shaped women's autonomy in health-seeking and broader household participation. Male household members typically controlled decisions regarding expenditures, mobility, and access to care.

- **Male-Dominated Decision-Making:** Women often needed permission to seek care, delaying services and potentially worsening health outcomes.

"I wanted to go for my check-up, but my father-in-law said it was not necessary. I had to wait until my husband returned from the fields." – **FGD Participant, Mardan**

- **Education and Health Awareness:** Literacy and exposure to health education improved women's ability to engage with health services and negotiate care decisions within households.

"After attending a session by the LHW, I realized why regular check-ups are important for me and my children." – **FGD Participant, Nowshehra**

- **Socio-Cultural Constraints:** Younger and newly married women experienced stricter mobility restrictions and limited access to information, whereas older women had greater autonomy, reflecting age- and status-dependent gender dynamics.

4. Community and System-Level Support

Community networks, NGOs, and health system interventions were critical in mitigating barriers to women's health and supporting rural development.

- **Community Support Networks:** Neighbors, relatives, and female peer groups assisted during illness or post-partum periods, reducing household burden and facilitating recovery.

"When I was sick after delivery, my neighbor cooked and cleaned for me; otherwise, I could not have managed." – **FGD Participant, Nowshehra**

- **Health System Challenges:** Systemic limitations, including understaffed facilities, intermittent medicine supply, and limited outreach, constrained effective service delivery.

"We try to reach every household, but sometimes medicines run out, and people have to travel far." – **KII Participant, Mardan**

- **NGO and Local Governance Interventions:** NGOs and local health committees provided health workshops, mobile clinics, and awareness campaigns, complementing government health services. Coverage remained uneven, emphasizing the need for context-driven, inclusive interventions.

Table 1. Themes, Sub-Themes, and Illustrative Quotes on Women’s Health and Rural Development in Mardan and Nowshetra, Khyber Pakhtunkhwa, Pakistan

Theme	Sub-theme	Illustrative Quote
1. Access to and Utilization of Health Services	Physical and Financial Barriers	“Sometimes we wait for days at the government hospital, but the private clinic is quick, although it costs more than we can afford.” – IDI Participant, Mardan
	Role of Community Health Workers	“Our LHW visits every month; she advises us when to go to the hospital and checks the children’s health.” – FGD Participant, Nowshetra
2. Women’s Health and Household Economic Productivity	Labor Substitution and Economic Strain	“When my wife fell ill after childbirth, I had to manage the fields and children myself. Our income dropped for that month.” – IDI Participant, Mardan
	Health-Related Expenditures	“I sold a goat to pay for my wife’s hospital visit. It was difficult for the family, but necessary.” – IDI Participant, Nowshetra
3. Social Norms, Gender Roles, and Decision-Making	Male-Dominated Decision-Making	“I wanted to go for my check-up, but my father-in-law said it was not necessary. I had to wait until my husband returned from the fields.” – FGD Participant, Mardan
	Education and Health Awareness	“After attending a session by the LHW, I realized why regular check-ups are important for me and my children.” – FGD Participant, Nowshetra
4. Community and System-Level Support	Community Support Networks	“When I was sick after delivery, my neighbor cooked and cleaned for me; otherwise, I could not have managed.” – FGD Participant, Nowshetra
	Health System Challenges	“We try to reach every household, but sometimes medicines run out, and people have to travel far.” – KII Participant, Mardan

Discussion

This study examined how women’s health influences rural social and economic development in the districts of Mardan and Nowshetra, Khyber Pakhtunkhwa (KP), from the perspectives of women, male household decision-makers, community stakeholders and health-system actors. The findings confirmed that women’s health functions as both an outcome and a driver of rural development, and is embedded within structural, cultural and institutional processes. The four major themes—(1) access to and utilization of health services, (2) women’s health and household economic productivity, (3) social norms, gender roles and decision-making, and (4) community

and system-level support—together illustrate a dynamic SDG (Sustainable Development Goal) nexus in which improvements in women's health generate cascading benefits across poverty, education, gender equity and community resilience.

The findings underscore the critical importance of health system access in shaping women's health and, by extension, rural development. Respondents identified multiple access barriers including travel time of 20–45 minutes to the nearest Basic Health Unit (BHU), high transport and treatment costs, and cultural preferences for private or traditional providers offering shorter waiting times and more culturally attuned care. These observations resonate with broader evidence from Pakistan that rural women face significant barriers to health-service utilization, linked to geography, cost and sociocultural acceptability (Raza, Hassan, & Rafiq, 2022; Naz, Khan & Azam, 2023). In particular, Naz et al. (2023) found that restricted mobility, low education and gendered norms significantly reduced care-seeking among rural women in KP. Likewise, literacy, awareness and trust in providers are known to influence service uptake (Ishfaq et al., 2022).

The prominent role of Lady Health Workers (LHWs) and Community Midwives (CMWs) emerged as a critical facilitating factor. Their regular home visits, health education services, and referrals were perceived by participants as enabling access to antenatal, reproductive and child-health care. This aligns with studies which show that community health worker programmes in Pakistan have improved maternal and child health indicators, but such programmes remain under-resourced and inconsistent (Naseem, Zafar & Rehman, 2022). From a development-systems perspective, enhancing primary-care reach and community-embedded care is central to strengthening the health-development nexus (World Health Organization [WHO], 2023).

A key contribution of this study is its empirical illumination of the link between women's health and household economic productivity in rural agrarian settings. Women's health interruptions particularly maternal perinatal conditions or chronic ailments—led to labor substitution in domestic and farm work, with men or older children stepping in, and consequent reductions in income and productivity. Such pathways mirror the finding by Gajate-Garrido (2015) that negative health shocks among rural Pakistani households reduce female and male labor participation and have longer-term livelihood effects. More recently, Jabeen, Haq, Jameel, Hussain, Asif, Hwang & Jabeen (2020) found that women's traditional economic activities in rural Pakistan augment household income but are constrained by socio-cultural and economic barriers. Our data expands this literature by linking women's health status explicitly to household economic output.

Participants also described how out-of-pocket health expenditures, borrowing, asset liquidation (e.g., selling a goat) and reduced food consumption were employed as coping strategies. These findings align with the notion of a “health-poverty trap” in rural Pakistan, where health shocks contribute to asset depletion, nutritional decline and livelihood vulnerability (UN Women Pakistan, 2018; World Bank, 2024). By demonstrating how women's health can undermine or support rural household resilience, our study situates health at the heart of rural development strategy rather than as a separate health sector issue.

The interplay of cultural norms, gender roles and decision-making power emerged as a pervasive theme in shaping women's health outcomes and their developmental implications. Respondents articulated the necessity of male permission for seeking care, the constrained mobility of younger or newly married women, and the differential autonomy of older women. These patterns correspond with documented gender-based restrictions on access to health, mobility and information in rural Pakistan (Mahmood & Ali, 2023). Moreover, the positive effect of health-

education sessions delivered by LHWs in enhancing women's health awareness and negotiation power suggests that targeted interventions can shift normative structures, albeit gradually. This finding supports broader research indicating that women's empowerment including decision-making autonomy, mobility, control over resources is significantly associated with improved nutrition and food security in rural Pakistan (Ishfaq et al., 2022).

Critically, our findings reinforce the conceptual framing that gender equity (SDG 5) and health (SDG 3) are mutually reinforcing. As women gain autonomy and access to health services, they are better able to contribute productively to their households and communities, thereby advancing development outcomes. This notion is echoed in the UN Women (2024) report emphasizing that gender-responsive health strategies are foundational to broader SDG achievement.

While individual and household-level barriers were widely documented, our study also highlighted the role of community networks, NGOs and institutional support in mitigating these barriers. Neighbour and peer-group support during periods of illness and post-partum recovery helped reduce the household labour burden and enabled women's recuperation. Such social capital is well recognized in rural development literature as enhancing resilience and buffering households against shocks (Saif, Wazir & Khan, 2024). Yet respondents also described systemic health-system shortcomings medicine stock-outs, understaffed facilities, and uneven NGO coverage which limited continuum of care. These limitations echo provincial health-system assessments in KP that call for improved governance, integration, financing and accountability in rural health settings (Government of Pakistan & WHO, 2023).

From a development policy standpoint, these findings suggest that strengthening rural health infrastructure, aligning community health workers with formal systems, and broadening NGO and local government collaboration are necessary to embed women's health within rural development planning. In doing so, health interventions must adopt a multisectoral lens, integrating health, education, gender empowerment, agriculture and social protection.

The empirical patterns observed in this study corroborate the notion that women's health is central to the SDG nexus in rural Pakistan. Specifically, improving women's health advances SDG 3 (Good Health and Well-Being), but also catalyzes progress on SDGs 1 (No Poverty), 2 (Zero Hunger), 4 (Quality Education) and 5 (Gender Equality). Development programmes that treat women's health as a siloed issue will fail to capture interlinkages and multiplicative benefits. Instead, policymakers should adopt an integrated strategy that links health-service delivery with livelihood support, women's empowerment, transportation access, and agricultural productivity interventions.

For KP province, where rural households face layered vulnerabilities, investing in women-centered primary health services, reducing travel and treatment costs, scaling community-midwife networks, enhancing health literacy and fostering female autonomy are all strategic priorities. These measures promise development dividends beyond health alone, reinforcing the vision of health as an engine of rural transformation.

Conclusion

This study explored how women's health shapes rural social and economic development in the districts of Mardan and Nowshera in Khyber Pakhtunkhwa, drawing on the perspectives of women, men, community actors, and health-system providers. The findings demonstrate that women's health is not merely a personal or household-level concern, but a structural determinant of rural development with far-reaching implications across agriculture, education, labor productivity, family well-being, and community resilience.

Women's access to healthcare, particularly reproductive, maternal, and primary care was strongly linked to patterns of household productivity and financial stability. Illness episodes, inadequate maternal health support, and delayed care-seeking resulted in reduced agricultural participation, reliance on coping mechanisms such as borrowing or selling assets, and increased vulnerability to poverty. Conversely, when women experienced good health, participants reported improved household productivity, increased children's school participation, enhanced decision-making abilities, and greater financial stability aligning with SDGs related to health, poverty reduction, food security, education, and gender equality.

The study also reinforces that cultural norms particularly mobility restrictions, male-led decision-making, limited women's autonomy, and intergenerational hierarchies remain key systemic barriers to achieving gender-equitable health outcomes. While community-based workers such as Lady Health Workers and midwives play a critical bridging role between households and formal healthcare systems, gaps in facility readiness, medicines availability, and transport access continue to undermine continuity of care. Ultimately, the study positions women's health as a central driver in the Sustainable Development Goals nexus: improving women's well-being has multiplier effects across development sectors, while failure to address gendered health inequities slows progress across multiple SDGs simultaneously.

Recommendations

Drawing on the findings of this study, the following recommendations are put forward for policymakers, development planners, health practitioners, and civil society actors engaged in rural development and gender-responsive health systems in Pakistan.

1. Strengthen Primary Healthcare Infrastructure and Service Delivery

Rural health systems require targeted investment to address persistent service gaps. Strengthening Basic Health Units and Rural Health Centers including improving staffing levels, medicine supply chains, diagnostic capacity, and provider accountability should be prioritized. Strengthened referral pathways between community-based workers and higher-tier facilities are essential to reduce delays in care, particularly in maternal and reproductive emergencies. Community-supported or subsidized transport models may further mitigate geographical and financial barriers limiting timely access.

2. Enhance Community Health Workforce Capacity

Given their central role in women's health access, LHWs, CMWs, and traditional birth attendants should receive enhanced technical training, supervision, fair remuneration, and performance support. Expanding their role to include counselling on reproductive rights, nutrition, chronic illness prevention, and mental health could address identified gaps and strengthen preventive health outcomes at household level.

3. Strengthen Gender-Responsive Health Education and Social Norms Transformation

Culturally contextualized health education campaigns focused on maternal health, menstrual health, nutrition, and preventive practices are needed to improve knowledge and shift harmful gender norms. Engaging men particularly religious leaders, husbands, and elder decision-makers in awareness-raising initiatives is critical to shifting household permission structures that constrain timely care-seeking.

4. Promote Women's Agency and Decision-Making Power

Efforts to enhance women's autonomy including literacy and skills training, financial inclusion programs, safe mobility initiatives, and leadership pathways—are necessary to ensure that women are not only health users but active health decision-makers. Such approaches should be

embedded within development, agricultural extension, and local governance programs to ensure relevance and sustainability.

5. Institutionalize Women's Health Within Rural Development Policies

Women's health should be positioned as a foundational pillar of development planning rather than a standalone health-sector concern. Provincial and national policy frameworks should explicitly integrate women's health indicators across agriculture, poverty reduction, food systems, and education strategies, aligned with national SDG reporting mechanisms. Monitoring frameworks should include measurable targets linked to gender-responsive health access and outcomes.

6. Strengthen Evidence Generation and Monitoring Systems

Future research should expand geographically and adopt mixed-methods or longitudinal designs to assess the longer-term developmental impacts of improved women's health. Health information systems should incorporate disaggregated data (by sex, age, geography, and socioeconomic status) to strengthen equity-oriented planning and accountability.

References

- Afridi, M. J., Riaz, K., & Naz, S. (2025). Bridging the gap: Exploring the digital divide and women's access to technology in rural Pakistan. *Policy Research Journal*, 3(8).
- Ali, S. B., Saleem, J., Ishaq, M., Shaista, ., Shah, M. A., & Ahmad, H. W. (2022). Gender and social determinants of health: A mixed-method study in Khyber Pakhtunkhwa, Pakistan. *Pakistan Biomedical Journal*, 7(1). <https://pakistanbmj.com>
- Amin, H., Riaz, K., & Jamil, M. (2025). Scrolling and studying: The impact of social media on students' productivity. *Social Sciences and Humanity Research Review*, 3(3), 2361–2372.
- Bazeley, P., & Jackson, K. (2013). *Qualitative data analysis with NVivo* (2nd ed.). SAGE.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. SAGE.
- Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). SAGE.
- Government of Pakistan. (2022). *National Health Accounts 2021–22*. Ministry of National Health Services, Islamabad.
- Government of Pakistan & UNICEF. (2022). *Lady Health Worker Programme Review Report*.
- Ishfaq, S., Anjum, A., Kouser, S., Nightingale, R., & Jepson, R. (2022). The relationship between women's empowerment and household food and nutrition security in Pakistan. *PLoS ONE*, 17(10), e0275713. <https://doi.org/10.1371/journal.pone.0275713>
- Ishtiaq, M., Riaz, K., & Naz, S. (2025). Beyond reach: Uncovering barriers to healthcare access among the marginalized population of Pakistan. *Frontier in Medical & Health Research*, 3(6).
- Jabeen, S., Haq, S., Jameel, A., Hussain, A., Asif, M., Hwang, J., & Jabeen, A. (2020). Impacts of rural women's traditional economic activities on household economy: Changing economic contributions through empowered women in rural Pakistan. *Sustainability*, 12(7), 2731. <https://doi.org/10.3390/su12072731>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE.
- Mahmood, S., & Ali, K. (2023). Gendered mobility and decision-making patterns in rural Khyber Pakhtunkhwa. *Asian Journal of Gender Studies*, 17(2), 112–129.

- Naz, S., Aslam, M., & Karim, R. (2022). Healthcare behavior, utilization and associated factors in the rural areas of Khyber Pakhtunkhwa Pakistan. *Journal of Development and Social Sciences*, 3(4), 254–265.
- Naz, S., Ayub, M., & Afridi, M. J. (2023). Factors affecting the choice of delivery among rural women of Khyber Pakhtunkhwa, Pakistan. *Journal of Development and Social Sciences*, 4(3), 23–30.
- Naz, S., Ishtiaq, M., & Riaz, K. (2024a). Effectiveness of e-pharmacy services in managing chronic diseases in rural Pakistan. *Journal of Development and Social Sciences*, 5(3), 442–452.
- Naz, S., Khan, O., & Azam, M. (2023). Determinants of rural women's healthcare behavior in Khyber Pakhtunkhwa, Pakistan. *Journal of Development and Social Sciences*, 4(1), 140–148.
- Naz, S., Riaz, K., & Nawab, S. (2024b). E-pharmacy in rural Pakistan: Evaluating platforms' reach, opportunities, and challenges. *Journal of Health and Rehabilitation Research*, 4(3). <https://doi.org/10.61919/jhrr.v4i3.1515>
- Naz, S., Riaz, K., & Shafi, M. (2025). Invisible wounds: Psychological effects of gender-based violence on rural women in Khyber Pakhtunkhwa, Pakistan. *International Journal of Social Sciences Bulletin*, 3(8), 872–883. <https://doi.org/10.5281/zenodo.16924401>
- Naseem, M., Zafar, A., & Rehman, F. (2022). Community health workers and maternal health equity in Pakistan: A district-level assessment. *Health Policy & Planning*, 37(9), 1119–1132.
- National Institute of Population Studies. (2023). *Pakistan Demographic and Health Survey 2022–23*.
- Pakistan Bureau of Statistics. (2023). *Pakistan Statistical Yearbook*.
- Raza, H., Hassan, H. R., & Rafiq, R. (2022). Rural women's access to health services: A case study of Pakistan. *Pakistan Journal of Social Research*, 4(1), 23–38.
- Raza, H., Hassan, H. R., & Rafiq, R. (2022). Rural women's access to health services in Pakistan. *Pakistan Journal of Social Research*, 4(1), 23–38.
- Riaz, K., Amin, H., & Azam, M. (2024a). Hygiene chronicles of Pakistan: Rural-urban disparities. *International Journal of Social Sciences Bulletin*, 3(1), 508–517.
- Riaz, K., Khan, S., Ishtiaq, M., & Amin, H. (2024b). Barriers and access to mental healthcare in rural areas of Pakistan: An inferential statistical analysis. *Journal of Population Therapeutics & Clinical Pharmacology*, 31(9), 2892–2902. <https://doi.org/10.53555/mhznzr83>
- Riaz, K., Naz, S., & Afridi, M. J. (2025). Too young to marry: A qualitative inquiry into the physical and mental health outcomes of child marriage in rural Pakistan. *The Research of Medical Science Review*, 3(8), 400–412.
- Saif, U., Wazir, A., & Khan, H. (2024). Community resilience and women's well-being in rural Pakistan. *Pakistan Development Review*, 63(1), 89–108.
- UN Women. (2018). *Status of the rural women in Pakistan*. Islamabad: UN Women Pakistan.
- UN Women. (2024). *Progress on the Sustainable Development Goals – Gender snapshot 2024*.
- United Nations. (2024). *Sustainable Development Goals Progress Report: Pakistan*.
- World Bank. (2024). *Gender, health financing & equity in Pakistan*. Washington, DC: World Bank.
- World Bank. (2024). *World Development Indicators*.
- World Health Organization. (2023). *Global Health Observatory: Women's Health Profile–Pakistan*.
- World Health Organization. (2023). *Primary health care performance in low-resource contexts: Country assessment Pakistan*. Geneva: WHO.